



SUMMARY Senior Software Engineer with 10+ years of experience specializing in **Ruby on Rails** and full-stack web development. Worked across a wide range of domains, including fintech, education, speech recognition, and real-time platforms, building and scaling robust, high-performance web applications, including real-time systems and AI-powered features based on speech processing and user interaction.

Strong background in backend architecture, performance optimisation, and complex data processing, with experience delivering enterprise systems and early-stage products from MVP to production.

Product-focused engineer with strong ownership and a proven ability to deliver solutions aligned with user and business goals. Experienced in distributed teams, collaborating closely with cross-functional stakeholders to deliver clean, maintainable solutions.

EXPERIENCE **Senior Software Engineer** at [Microverse](#), Remote
Apr 2022 – Apr 2026
Senior Full-Stack Engineer at [AxiomQ](#), Novi Sad, Serbia
May 2017 – Mar 2022
Ruby on Rails Engineer at Orange Iceberg (later [AxiomQ](#)), Novi Sad, Serbia
Feb 2015 – May 2017

EDUCATION **Master in Traffic Engineering (Postal Traffic and Telecommunications), University of Novi Sad**, Serbia, Faculty of Technical Sciences (2011 - 2012)
Bachelor in Traffic Engineering (Postal Traffic and Telecommunications), University of Novi Sad, Serbia, Faculty of Technical Sciences (2007 – 2011)
Vocational engineer of traffic engineering (Postal and Banking Technologies), ICT College of vocational studies, Belgrade, Serbia (2002 - 2005)

SKILLS

Technical Skills

Backend - Ruby, Ruby on Rails

Databases: PostgreSQL, MySQL, Redis, Metabase

Frontend: JavaScript, React, Stimulus, jQuery, EmberJS, TypeScript

Styling: HTML5, CSS3, Bootstrap, Tailwind CSS

Testing: RSpec, Cucumber, Jest, Playwright

Infrastructure: Docker, Kubernetes, Heroku, AWS S3

Messaging & Jobs: Sidekiq, RabbitMQ

APIs: RESTful Web Services

Tools: Git, GitHub, CI/CD

Methodologies: Scrum, Agile

Additional: AI proficiency, Product engineering, Troubleshooting

Core Competencies

Product-driven development focused on user and business needs

End-to-end ownership and accountability

Cross-functional collaboration

Pragmatic decision-making balancing speed, quality, and impact

CONTACT INFO

Email: lakatos.ivica@gmail.com

Tel: +381 605906906

[LinkedIn](#) | [GitHub](#)

EXPERTISE

Senior Software Engineer
10+ years experience

Lead Engineer
7+ years experience

LANGUAGES

Serbian
Native

English
Understanding: C1
Speaking: C1
Reading: C1

PROJECTS

Microverse - USA (Remote) (Apr 2022 – May 2026)

Project name: **Full-Stack Web Development Program**

Role: **Senior Software Engineer**

Project Description: [Microverse](#) is an online school for full-stack developers, backed by [Y Combinator](#), providing a remote, collaborative learning environment for students worldwide. The platform provides structured learning content, peer-to-peer learning, project-based assignments, and real-time communication between students and mentors.

The initial version of the platform relied heavily on no-code and low-code tools (Make, Zapier, Airtable), which were later replaced with a fully custom-built system to improve scalability, reliability, and maintainability.

- Responsibilities:
- Playing a key role in migrating initial no-code/low-code solutions to a scalable **Ruby on Rails** application
 - Developing and maintaining core platform features using Ruby on Rails
 - Designing and optimizing backend systems for scalability and performance
 - Improving collaboration workflows and overall user experience
 - Writing automated tests and ensuring code quality (RSpec)
 - Collaborating with cross-functional teams (product, design, engineering)
 - Contributing to architectural decisions and system improvements
 - Investigating and resolving production issues

Tools & Technologies: Ruby, Ruby on Rails, JavaScript, PostgreSQL, Redis, RSpec, Bootstrap, Docker, Heroku, Make, Zapier, Airtable

Leap - USA (Remote) (May 2024 – May 2026)

Project name: **Leap - Online platform for English speaking practice**

Role: **Senior Software Engineer**

Project Description: [Leap](#) is an online platform designed to help users improve their English speaking skills through real-time conversations with people who share similar interests. The platform combines live video sessions, user matching, and structured learning experiences, including **AI-powered feedback** and interactive exercises.

- Responsibilities:
- Implementing real-time communication using WebSockets / LiveKit and React for live video sessions
 - Integrating AI-based feedback using speech processing and external services (OpenAI, SpeechAce)
 - Designing backend logic for session management and user matching
 - Ensuring reliability and performance of live session workflows
 - Designing and maintaining REST APIs for client-server communication
 - Writing automated tests and ensuring code quality (RSpec, Vitest)
 - Collaborating with cross-functional teams (product, design, engineering)
 - Investigating and resolving production issues in real-time systems

Tools & Technologies: Ruby, Ruby on Rails, React, Stimulus, PostgreSQL, Redis, Sidekiq, RSpec, Vitest, HTML, CSS, Docker, Heroku, LiveKit, WebSockets

Fuga - Netherlands (Jun 2019 – Apr 2022)

Project name: **Music Royalty Accounting Software (RASA)**

Role: **Senior Ruby on Rails Developer**

Project Description: **FUGA** provides software solutions for the music industry, covering digital distribution, rights management, and royalty processing. The Royalty Accounting Software (RASA) is a complex, enterprise-level system for processing contracts against revenue streams, enabling clients to aggregate income data and generate customized royalty reports across various deal structures.

- Responsibilities:
- Developing and maintaining complex backend features using Ruby on Rails
 - Designing and optimizing database structures for performance and scalability (indexing, partitioning, replication)
 - Improving application performance and handling large-scale data processing workflows
 - Building and enhancing frontend functionality using React
 - Writing automated tests and ensuring code quality (RSpec)
 - Collaborating within Agile teams to deliver incremental product improvements
 - Selecting and integrating technologies such as Redis (caching) and RabbitMQ (messaging)
 - Investigating and resolving production issues in a high-throughput environment

Tools & Technologies: Ruby, Ruby on Rails, JavaScript, React, PostgreSQL, Redis, RabbitMQ, HTML, CSS, Bootstrap, RSpec, Docker, Kubernetes, Jira

Enercity AG - Germany (Mar 2019 – May 2019)

Project name: **Secure Resource Sharing Service (SRSS-GUI)**

Role: **Lead React Developer**

Project Description: **Enercity AG** is a major German energy provider delivering electricity, gas, water, and related services. The SRSS-GUI project involved building a frontend application for secure resource sharing, integrating with multiple backend microservices developed in Go.

- Responsibilities:
- Setting up the frontend project and development environment
 - Designing and implementing frontend architecture using React
 - Developing user interface features and integrating with backend microservices
 - Writing automated tests and ensuring code quality (Jest)
 - Supporting team members and contributing to knowledge sharing

Tools & Technologies: JavaScript, React, HTML, CSS, Bootstrap, Golang, Jest, Docker, Trello

InspectionXpert - USA (Nov 2018 – Feb 2019)

Project name: **InspectionXpert Ballooning Software**

Role: **Full-Stack Developer (Ruby on Rails, React)**

Project Description: [InspectionXpert](#) is a precision manufacturing application for extracting structured data from technical drawings and PDFs. The platform replaces manual data entry by enabling users to identify fields (“ballooning”) and extract data using OCR (optical character recognition), significantly improving efficiency and accuracy in inspection workflows.

- Responsibilities:
- Setting up and maintaining full-stack architecture (Rails + React)
 - Developing application features from MVP to production
 - Designing and implementing REST APIs using Ruby on Rails
 - Building and enhancing frontend interfaces using React
 - Writing automated tests and ensuring code quality (RSpec, Cucumber)
 - Collaborating with team members and contributing to task planning
 - Creating and describing tasks for rest of the developers
 - Deploying and maintaining the application on Heroku

Tools & Technologies: Ruby, Ruby on Rails, JavaScript, React, PostgreSQL, RSpec, Cucumber, Heroku, HTML, CSS, Trello

Keen Research - USA (Feb 2018 – Oct 2018)

Project name: **Keen Research Automated Speech Recognition (ASR) dashboard**

Role: **Lead Developer**

Project Description: [Keen Research Dashboard](#) develops SDKs and tools for on-device speech recognition. The ASR dashboard is a web platform that enables developers to upload audio recordings and manage speech recognition data, providing interfaces for processing, analysis, and transcription workflows.

- Responsibilities:
- Leading development from MVP to production
 - Designing system architecture and backend services using Ruby on Rails
 - Developing performant APIs for handling audio uploads and metadata
 - Implementing asynchronous processing for large audio and log files
 - Building UI tools for transcription workflows using Bootstrap and jQuery
 - Ensuring database performance and reliability (MySQL)
 - Writing automated tests and maintaining code quality (RSpec, Cucumber)
 - Setting up continuous integration (SemaphoreCI)

Tools & Technologies: Ruby, Ruby on Rails, JavaScript, jQuery, MySQL, HTML, CSS, Bootstrap, SemaphoreCI, Trello

AxiomQ Ventures - Serbia (Nov 2017 – Jan 2018)

Project name: **InfoZgrada**

Role: **Ruby on Rails Developer**

Project Description: [InfoZgrada](#) is a multi-tenant web platform connecting tenants, building managers, and service providers, streamlining communication and residential community management.

- Responsibilities:
- Developing and maintaining backend features using Ruby on Rails
 - Implementing and managing background jobs and scheduled tasks
 - Writing automated tests and ensuring code quality (RSpec, Cucumber)
 - Contributing to frontend implementation and application design

Tools & Technologies: Ruby, Ruby on Rails, JavaScript, jQuery, PostgreSQL, RSpec, Cucumber, HTML, CSS, Bootstrap, Heroku, SemaphoreCI, Trello

AxiomQ Ventures - Serbia (Aug 2017 – Oct 2017)

Project name: **NG Collector**

Role: **Ruby on Rails Developer**

Project Description: [NGCollector](#) is a web application for managing and tracking magazine collections, replacing manual tracking systems with a structured and user-friendly digital solution.

- Responsibilities:
- Developing frontend and backend application features using Ruby on Rails and jQuery
 - Writing automated tests and ensuring code quality
 - Building dynamic UI components to improve user experience
 - Improving backend performance and application responsiveness

Tools & Technologies: Ruby, Ruby on Rails, JavaScript, jQuery, PostgreSQL, Heroku, SemaphoreCI, HTML, CSS, Bootstrap, Trello

Thompson Educational Publishing - Canada (Sep 2016 – Jul 2017)

Project name: **Thompson Learn**

Role: **Full-Stack Developer (Ruby on Rails, Ember.js)**

Project Description: [Thompson Learn](#) is an online learning platform designed to support teachers and students through interactive content and structured learning experiences.

- Responsibilities:
- Developing frontend features using Ember.js
 - Designing and maintaining a performant Rails API
 - Writing automated tests and ensuring code quality
 - Maintaining and updating system dependencies and tools
 - Implementing features to enhance user experience for educators and students
 - Ensuring application security and data integrity

Tools & Technologies: Ruby, Ruby on Rails, JavaScript, Ember.js, PostgreSQL, HTML, CSS, Trello

Earth.org Häuser GmbH - Germany (Jun 2016 – Aug 2016)

Project name: **Earth.org**

Role: **Ruby on Rails Developer**

Responsibilities: Built a web platform for investing in housing cooperatives, delivering the product from idea to MVP, including backend development, testing (RSpec), metrics tracking (Mixpanel), and deployment on Heroku.

Tools & Technologies: Ruby, Ruby on Rails, jQuery, PostgreSQL, RSpec, Heroku, Mixpanel

Loyalsnap - USA (Mar 2016 – May 2016)

Project name: **Loyalsnap application**

Role: **Software Developer**

Responsibilities: Developed features for a marketing automation platform integrating with the MINDBODY API, focusing on email and SMS workflows and resolving production issues.

Tools & Technologies: Ruby, Ruby on Rails, HTML, CSS, MINDBODY API, MailChimp, MySQL

Dream Holidays Group (DHG) - Iraq (Jan 2016 – Feb 2016)

Project name: **Dream Holiday Insurance (DHI)**

Role: **Ruby on Rails Developer**

Responsibilities: Built features for a travel insurance platform, including PDF generation and core application functionality, with a focus on stability and production support.

Tools & Technologies: Ruby, Ruby on Rails, HTML, CSS, Bootstrap, MySQL

Sun.org GmbH - Germany (Feb 2015 – Dec 2015)

Project name: **Yoga/Ayurveda Site network**

Role: **Ruby on Rails Developer**

Responsibilities: Developed a multi-site CMS platform and API, migrating legacy PHP systems to Rails and supporting multiple web applications from a centralized backend.

Tools & Technologies: Ruby, Ruby on Rails, JavaScript, jQuery, HTML, CSS, Bootstrap, MySQL, Trello, Capistrano